

Institute For  
**New Economic Thinking**

# **Creating Money: for what purpose?**

*Towards a Sustainable Financial System*

**London School of Economics**  
**21 March 2014**

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***Credit, Money and Leverage: What Wicksell, Hayek and Fisher Knew and Modern Macro-economics Forgot.*** Stockholm School of Economics Conference “Towards a Sustainable Financial System”, 12 September 2013,  
<http://ineteconomics.org/blog/institute/adair-turner-credit-money-and-leverage>

***Escaping the Debt Addiction: Monetary and Macro-prudential Policy in the Post-crisis World.*** Center for Financial Studies, Frankfurt, 10 February 2014  
(<http://ineteconomics.org/blog/institute/adair-turner-escaping-addiction-private-debt-essential-long-term-economic-stability>)

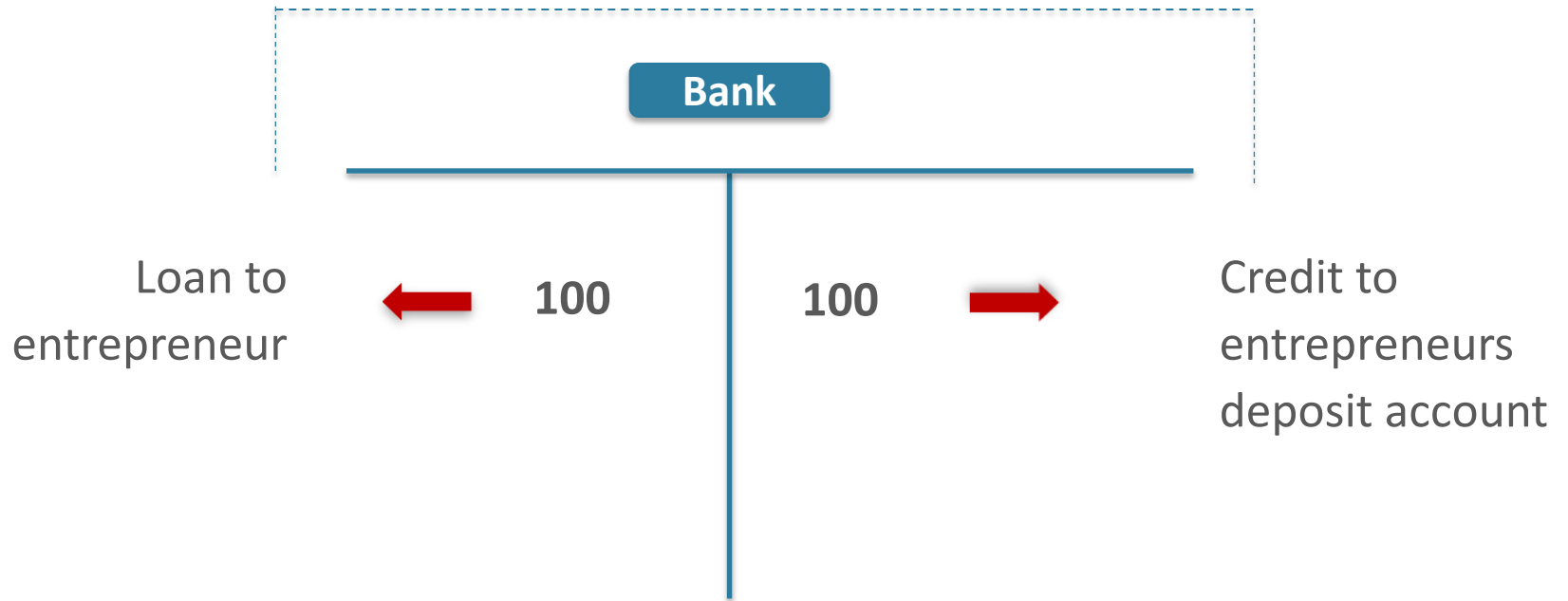
**Theory: Money creation and debt**

**Empirics: Rising leverage and the  
policy conundrum**

**Categories of credit**

**Implications**

# Banks create credit, money and purchasing power



# Two (closely related) issues

- ❖ Bank credit, money and purchasing power creation
- ❖ Debt contracts – whether bank or non-bank

# Credit creation as enabler of adequate demand growth

## Pure metallic money

- Money supply constrained by precious metal resources
- Real growth may require downward flexibility of wages and prices
- Pure 'hoarding' possible

## Alternatives / complement

- Pure fiat money creation: unfunded fiscal deficits
- Private bank (or other) credit extension
- Funded fiscal deficits

# Alternative ways to stimulate nominal demand

Pure fiat money: unfunded fiscal deficits



- ❖ New money
- ❖ Increase in private NFA

Private credit and money creation



- ❖ New money
  - And future private debt
- ❖ No increase in private NFA
  - But maturity transformation

Funded fiscal deficits



- ❖ No New money
- ❖ But increase in private NFA
- ❖ And future public debt liability

## Advantages

## Disadvantages

### Fiat money creation

- ❖ Always possible
- ❖ Public authorities can choose optimal quantity

- ❖ Allocation is political decision
- ❖ Tendency to excessive use

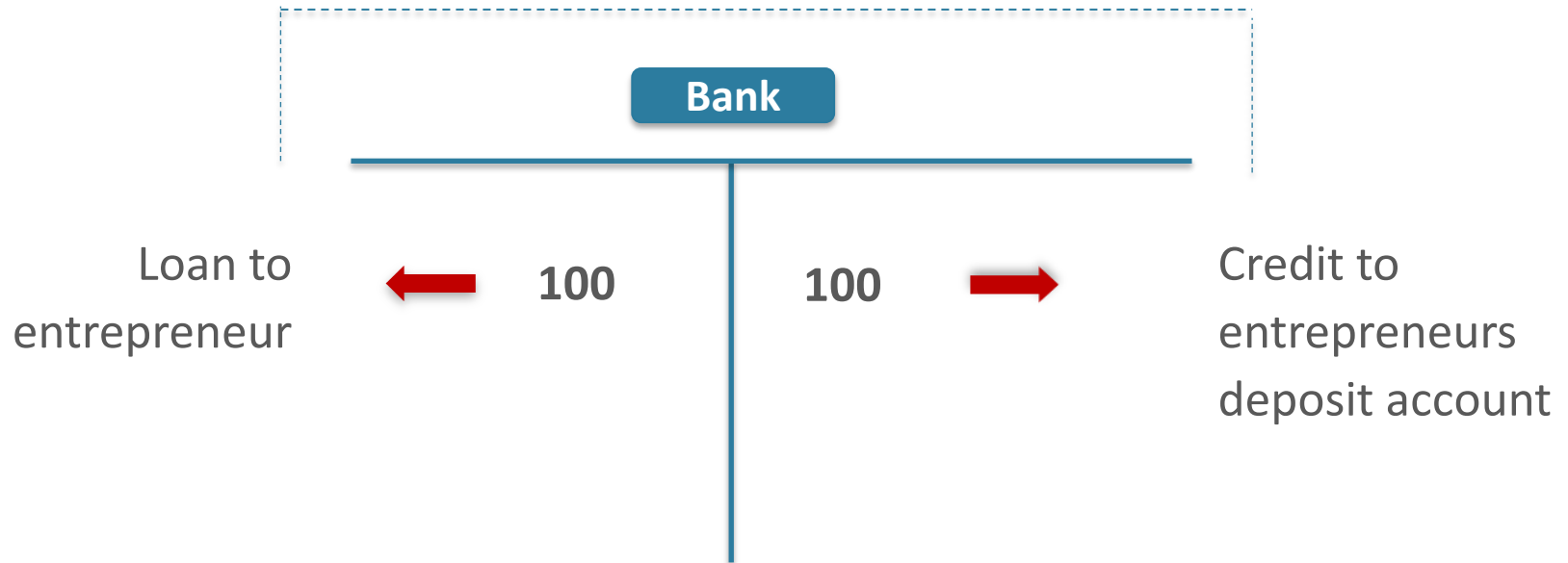
### Private credit creation

- ❖ Allocation determined by market disciplines

- Is the amount created optimal?
- Implications of resulting debt contracts?



# Banks create credit, money and purchasing power



## Wicksell's thesis:

- Bank purchasing power creation optimal if:

$$\text{Money Rate of Interest} = \text{Natural Rate of Interest (MPC)}$$

# Credit to businesses/entrepreneurs/other investors in real capital



Skews demand toward investment, not consumption



*“Forced saving”*

*“An increase in capital creation at the cost of consumption, through the granting of additional credit without voluntary action on the part of the individuals who forego consumption, and without them deriving any immediate benefit”.*

(Friedrich Hayek, *The Monetary Theory of the Trade Cycle*, 1929)

**Credit driven  
“forced saving”**



### Potential Benefit

- ❖ More rapid rate of growth
- ❖ Japan/Korea “financial repression” models of development



### Potential Disadvantage

- Over-investment cycles
- Macro-economic imbalance
  - Growth sustained by yet more credit

# Two (closely related) issues

❖ Bank credit, money and purchasing power creation

❖ **Debt contracts – whether bank or non-bank**

# Debt contracts: The finance theory perspective

- ❖ Non-state contingent contracts overcome “costly state verification” → advantages over equity contracts in business finance
- ❖ Essential to mobilisation of capital
- ❖ Empirical evidence of benefits of financial deepening, i.e. bank credit ÷ GDP

# The pre-crisis orthodoxy

## Central Banks / monetary theory

Low and stable inflation objective

Financial system a veil –

*“money, credit and banking play no meaningful role”*

Implicitly Wicksellian

## Finance theory

Debt contracts essential

General confidence that free markets will produce optimal balance

Main concerns about insufficiently high credit ÷ GDP ratios

# The problems with debt



- Cycles of over-supply and over-demand
- 'Local thinking'



- Bankruptcy and default
- Rollover need and impaired lending capacity
- Debt overhang

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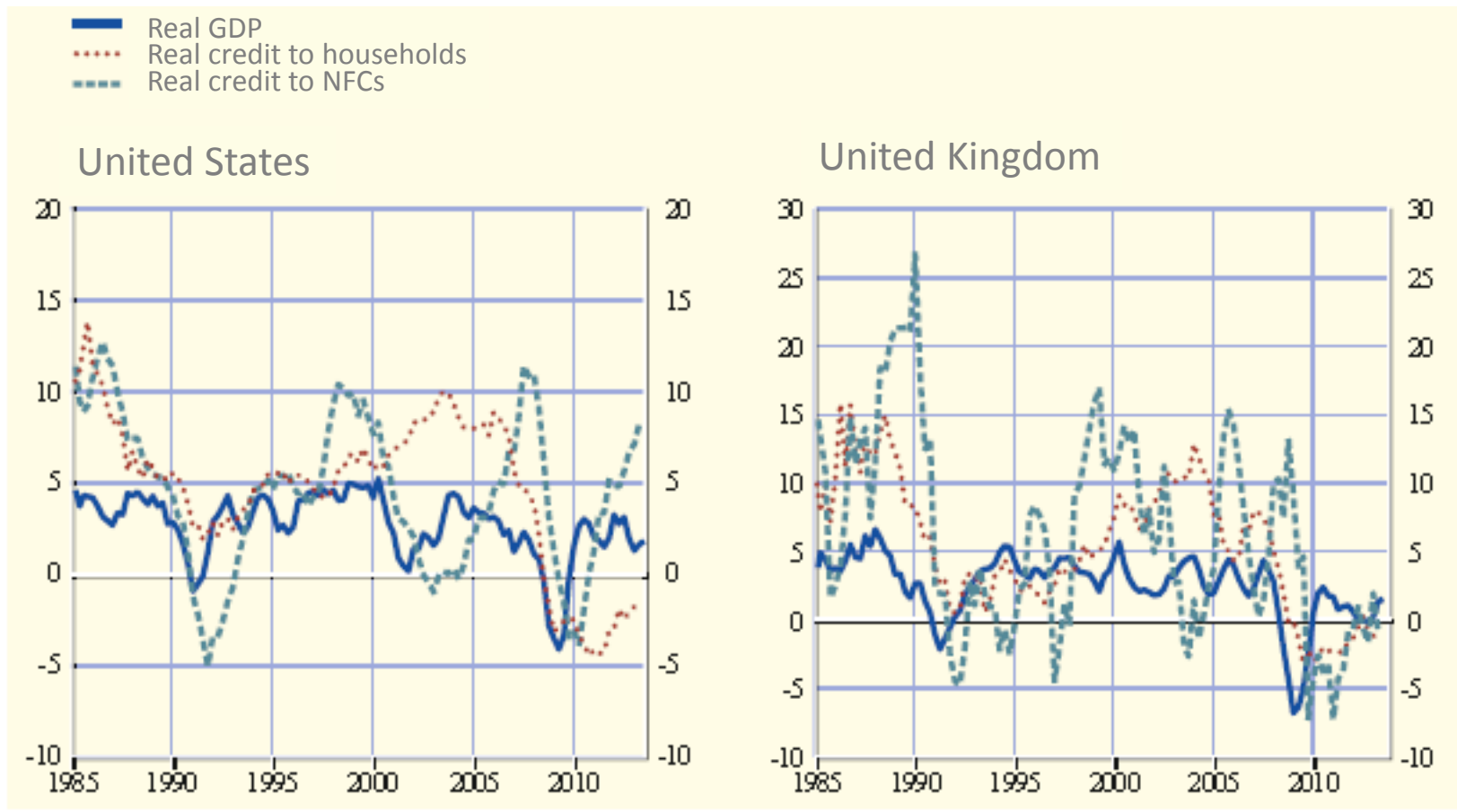
**Categories of credit**

**Implications**



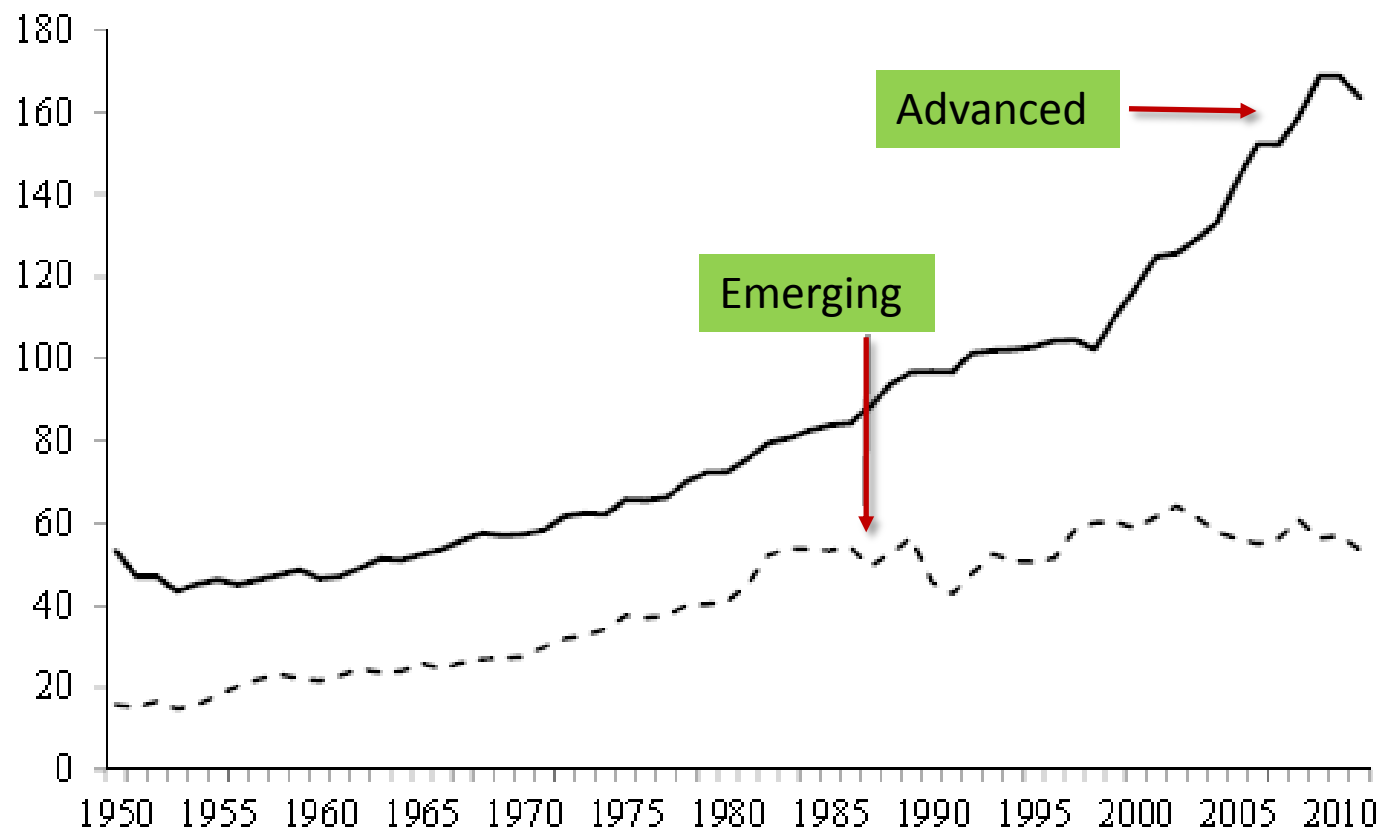
# Dynamics of real GDP and credit

(Year on year % change)



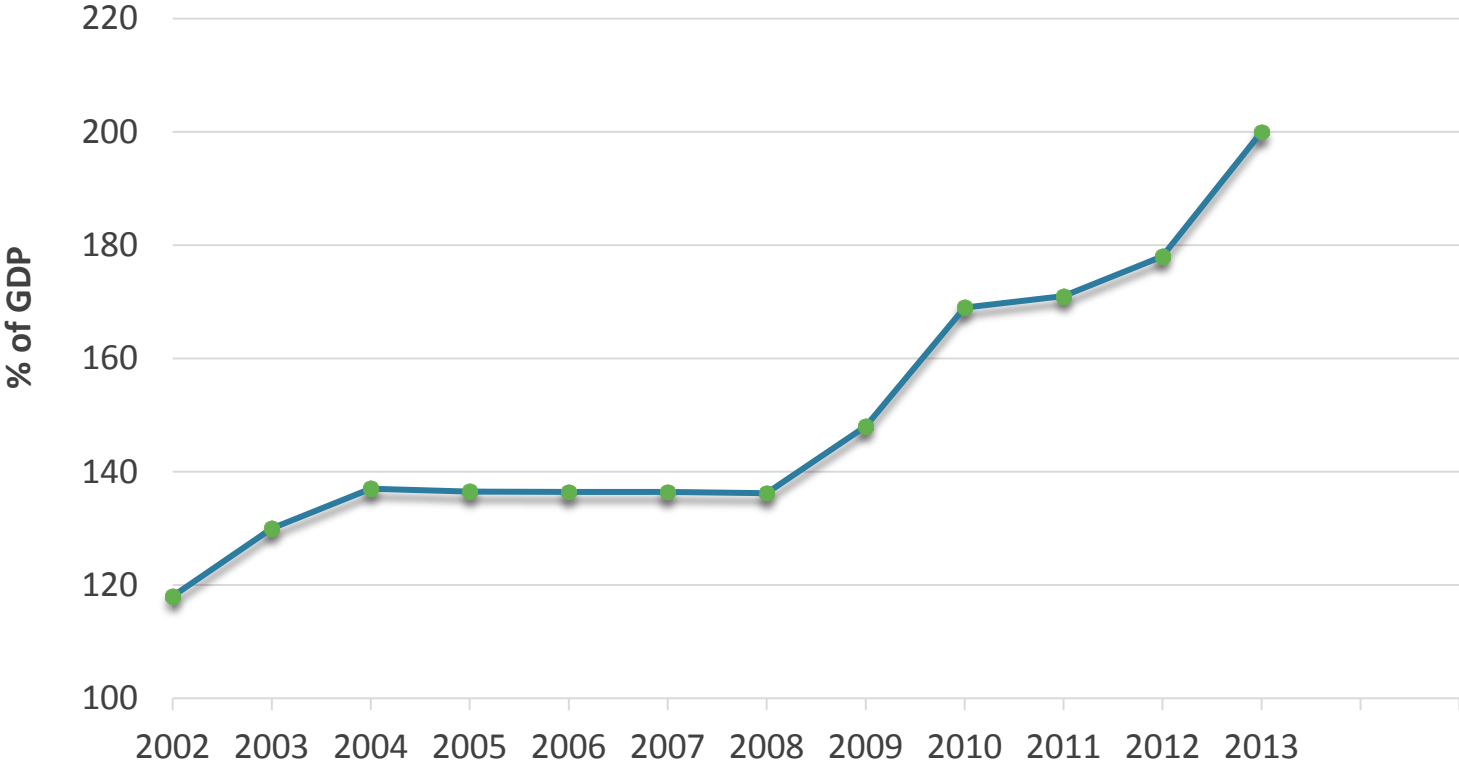
Source: Monthly Bulletin, European Central Bank, January 2014

# Private domestic credit as a % of GDP: 1950 – 2011




Source: *Financial and Sovereign Debt Crises: Some Lessons Learned and Those Forgotten*, C. Reinhart & K. Rogoff, 2013

# China: total social finance to GDP



# The Dilemma

Pre-crisis path of nominal GDP growth  $\sim$  4% - 5%   $\sim$  2% real growth  
 $\sim$  2% inflation

Pre-crisis path of credit growth  $\sim$  10% - 15%

**If central banks had raised interest rates to slow credit growth**

.... this would presumably mean slower nominal GDP growth?

**We seem to need  $\dot{C} > \text{NGDP}$  to ensure adequate NGDP**

... but this produces financial instability and post-crisis recession

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# Three conceptually distinct functions of lending

## Finance of increased consumption

- Enabling inter-temporal shift of consumption within life time income

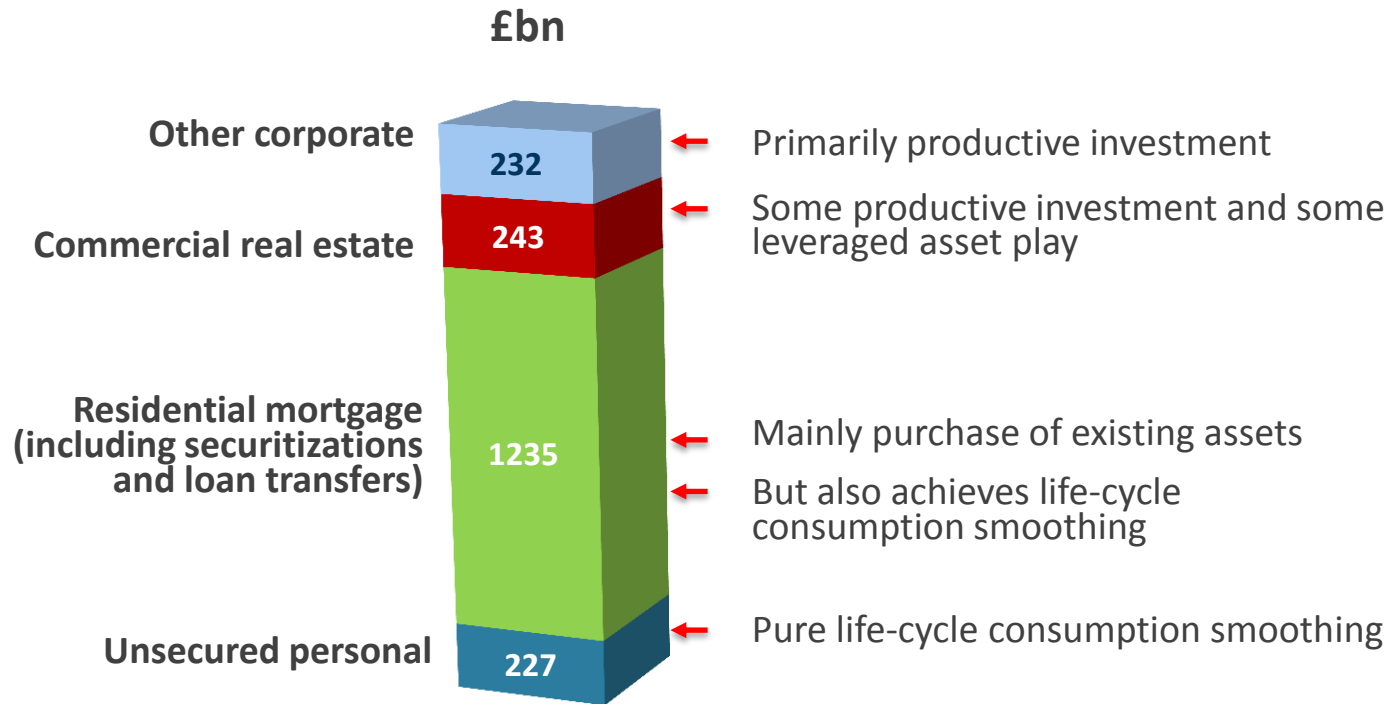
## Finance of new capital investment

- Non-real estate
- Commercial real estate
- Residential real estate
- Human capital

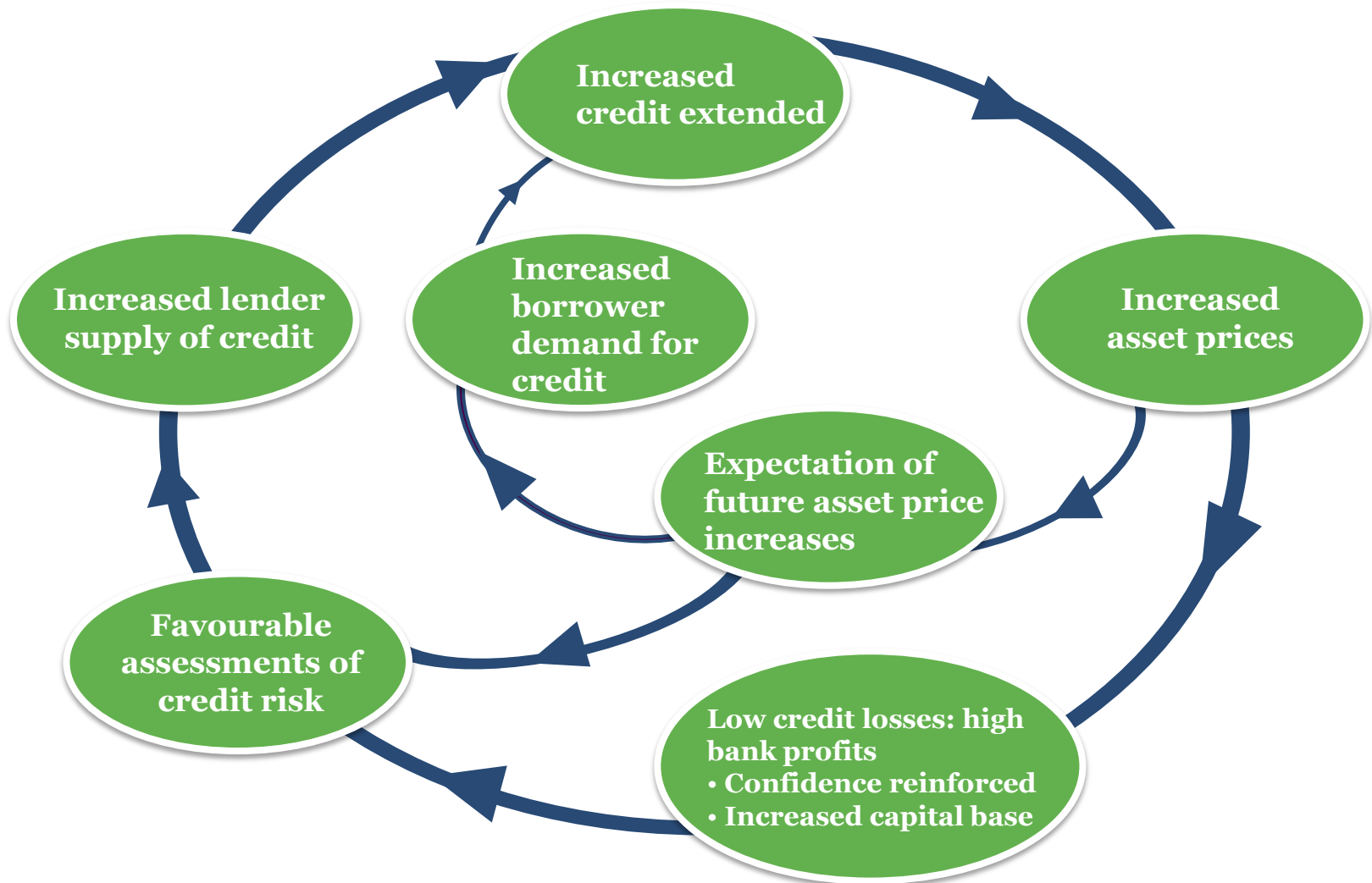
## Finance of purchase of existing assets

- Real estate
- Collectibles
- Existing business assets – e.g. Leveraged Buy Outs

# Categories of debt: UK, 2009



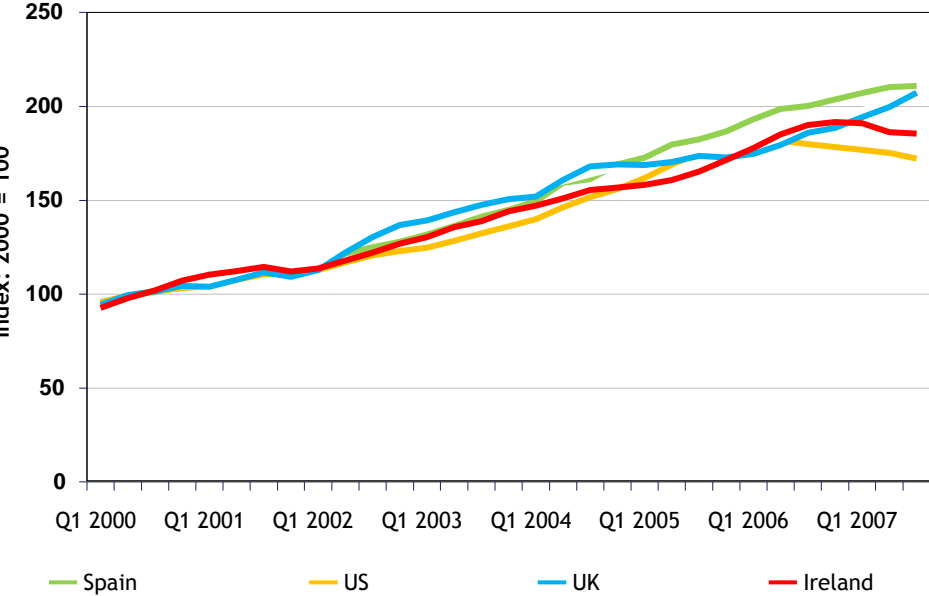
# Credit and asset price cycles





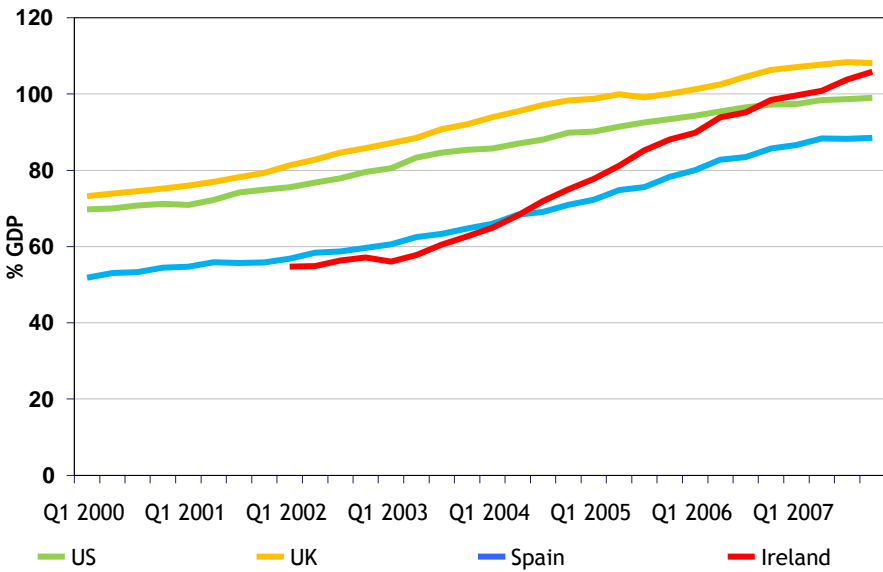
# Credit extension and house prices

House prices 2000 – 2007



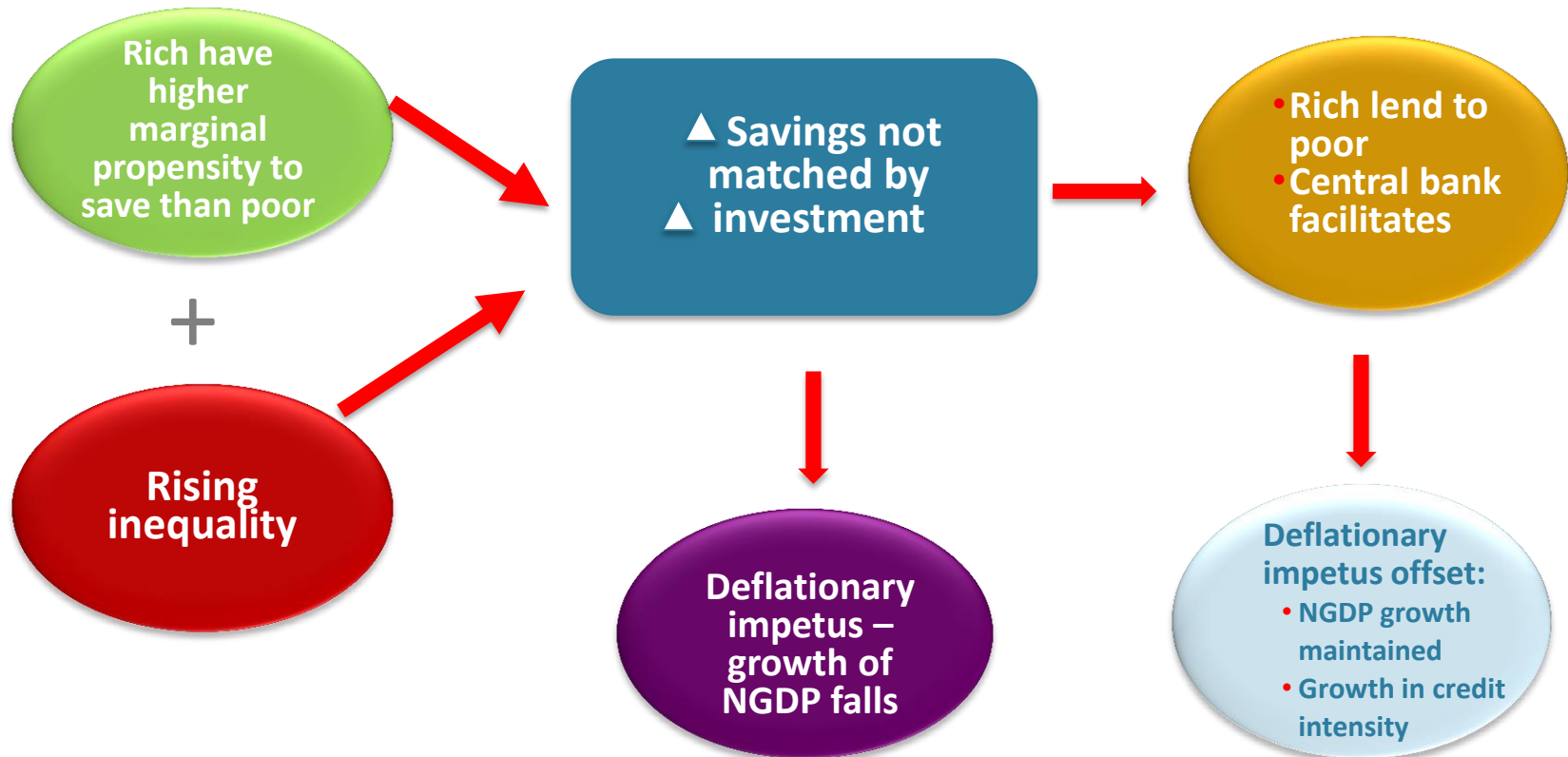
Source: Ministry of Housing (Spain), S&P (US), DCLG

Household debt as a % of GDP 2000 – 2007

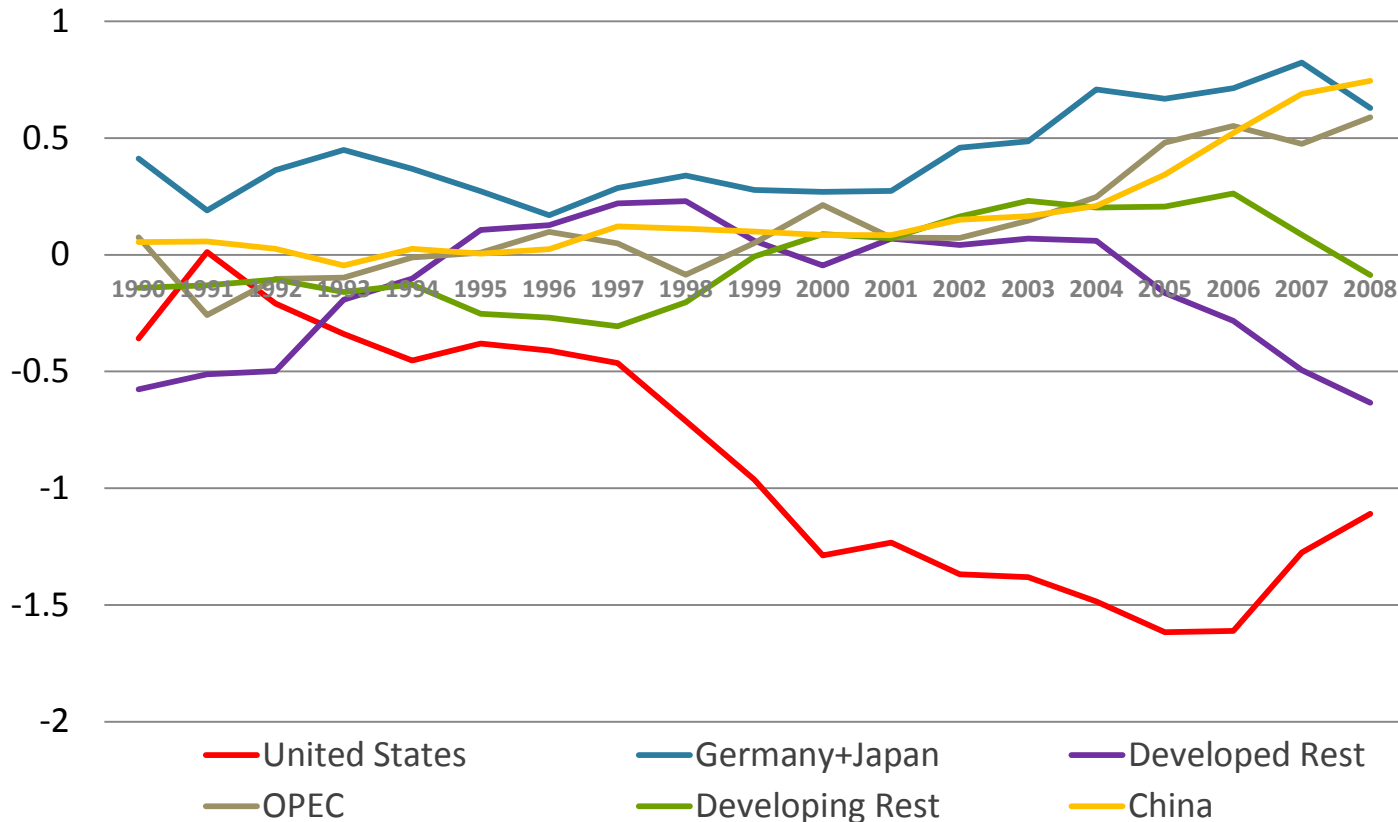


Source: BEA; ONS; ECB

# Inequality, demand and credit



# Global current account balances as a % of world GDP



Source: IMF BOPS

# The problems with debt

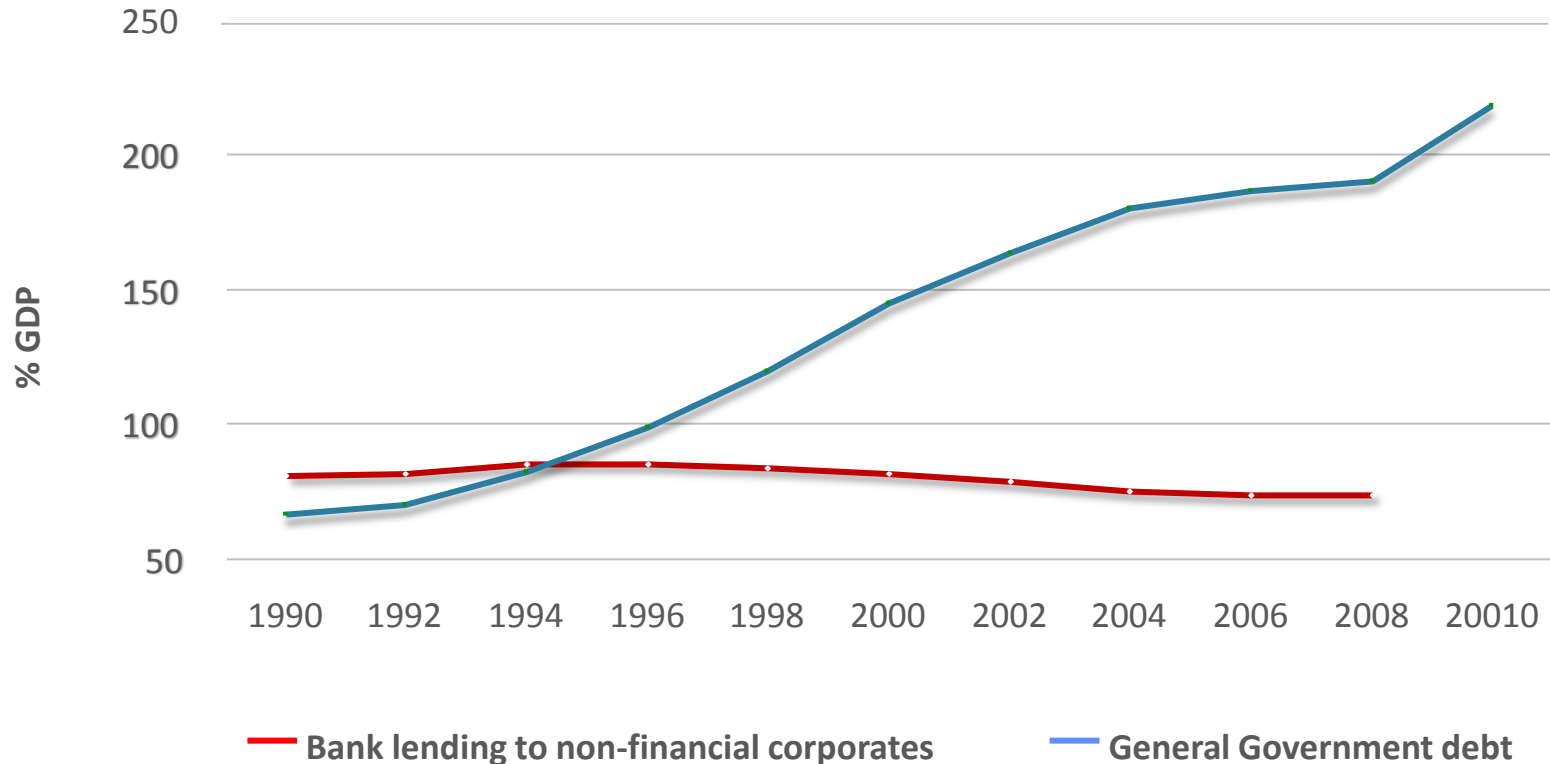


- Cycles of over-supply and over-demand
- 'Local thinking'



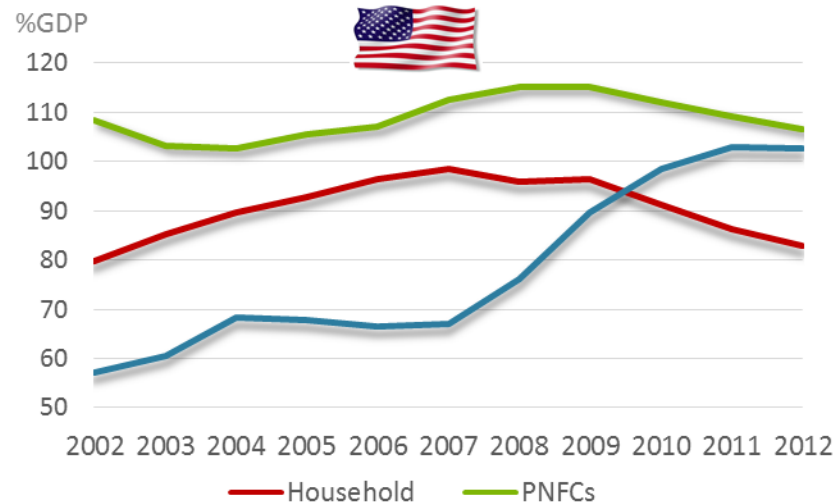
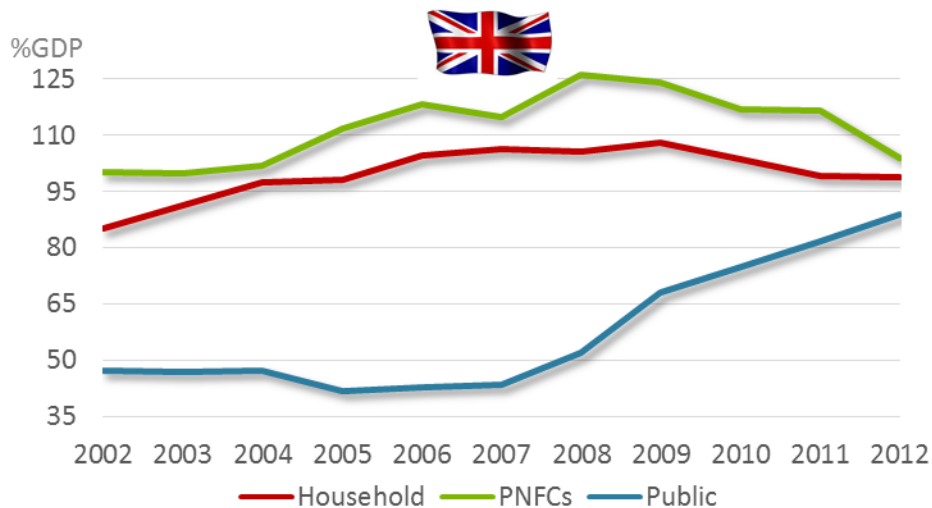
- Bankruptcy and default
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# Japanese government and corporate debt: 1990 – 2010



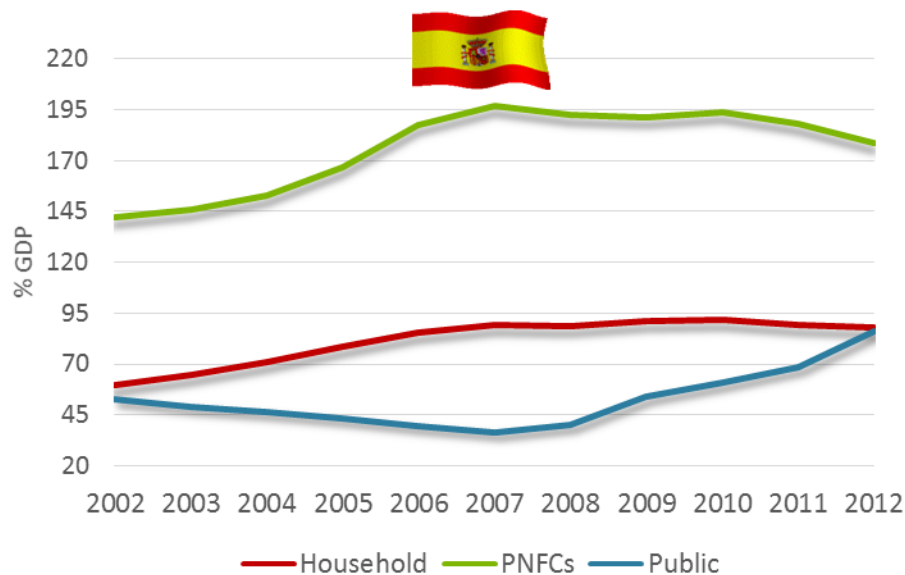
Source: BoJ Flow of Funds Accounts, IMF WEO database (April 2011), FSA calculations

# Shifting leverage: Private and public debt-to-GDP



Source: OECD National Accounts

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## Advantages

## Disadvantages

### Fiat money creation

- ❖ Always possible
- ❖ Public authorities can choose optimal quantity

- ❖ Allocation is political decision
- ❖ Tendency to excessive use

### Private credit creation

- ❖ Allocation determined by market disciplines
- ❖ Optimal amount ensured by policy interest rate?

- ❖ Market misallocation possible
  - Overinvestment cycles
  - Existing asset price cycles
- ❖ No, because of heterogeneity of interest rate elasticity
- ❖ Ongoing debt contracts → rollover and overhang effects

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# Policies required to achieve more stable growth

Reduction in inequality or at least reduced pace of increase in inequality

Reduction in global current imbalances between surplus and deficit nations

- ❖ Remove biases to credit creation in deficit countries
- ❖ Remove biases to excessive savings in surplus countries

Integrated set of monetary, macro-prudential and fiscal policies to lean against 'too much of the wrong sort of debt'.

# Specific policy options and issues

**Constrain level as well as rate of growth of leverage**

But no precise threshold for 'Too Much' leverage

**Increase capital risk weights for real estate finance above IRB estimates**

Social optimal weights  $\neq$  privately optimal  
Address externality and bias

**LTV and LTI limits in real estate lending**

Borrower constraint since lender constraints imperfect

**Banks with dedicated focus on non-real estate business finance**

To avoid "crowding out"